

Title (en)
METHOD AND AIRCRAFT FOR MONITORING OPERATIONAL STATES AND FOR DETERMINING OUTAGE PROBABILITIES OF CURRENT-CARRYING LINE SYSTEMS

Title (de)
VERFAHREN UND FLUGGERÄT ZUR ÜBERWACHUNG VON BETRIEBSZUSTÄNDEN UND ZUR ERMITTLUNG VON AUSFALLWAHRSCHEINLICHKEITEN VON STROMFÜHRENDEN LEITUNGSSYSTEMEN

Title (fr)
PROCÉDÉ ET APPAREIL VOLANT POUR SURVEILLER DES ÉTATS OPÉRATIONNELS ET DÉTERMINER DES PROBABILITÉS DE DÉFAILLANCE DE SYSTÈMES DE LIGNES ÉLECTRIQUES

Publication
EP 4200587 A1 20230628 (DE)

Application
EP 21766433 A 20210819

Priority
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Abstract (en)
[origin: CA3192091A1] A method for monitoring operational states and for determining outage probabilities of overhead power line systems from the air using an aircraft 1, and an aircraft provided to this end are described. To this end, the aircraft 1 in the form of a helicopter is equipped with a sensor system 14 for measuring physical properties of the overhead power line systems with high-resolution digital cameras 13 for image data and with a high-resolution laser scanning system 12 for detecting ambient conditions. The sensor system 14, the digital cameras 13 and the laser scanning system 12 are coupled to satellite navigation systems, apart from GPS, with the detected data being assigned to one another and correlated with one another in relation to both space and time. Monitoring is implemented by way of a single fly-past using the aircraft 1 on the basis of a specified flight profile, and the determined data are supplied to a processing unit which, following an appropriate evaluation, directly indicates or outputs necessary repairs and/or maintenance recommendations on an output unit.

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CPC (source: EP US)
G01M 5/0025 (2013.01 - EP); **G01M 5/0033** (2013.01 - EP); **G01M 5/0075** (2013.01 - EP); **G01M 11/081** (2013.01 - EP US); **G01R 31/085** (2013.01 - US)

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DOCDB simple family (publication)
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